

Appl. No. 10/801,828  
Amdt. Dated Jan. 18, 2006  
Reply to Office Action of October 18, 2005

**Amendments to the Specification**

Please replace paragraph [0017] with the following amended paragraph:

[0017] The substrate 1 is a transparent substrate, and it can be made from glass or silicon oxide. The material of the gate electrode 2 can be a metallic conductive material, such as Cu, Al, Ti, Mo, Cr, Nd, Ta, or alloys thereof. The gate insulation layer 4 can be made of silicon nitride or silicon oxide. The channel layer 5 can use amorphous silicon or polycrystalline silicon. The ohmic contact layers 6a and 6b can adopt amorphous silicon or phosphor-doped polycrystalline silicon. The surface of the gate electrode 2 is parallel with the surface of the substrate 1. The gate electrode 2 controls the TFT 200 to switch on or off, and the TFT 200 is applied to a single-gated transistor.

Please replace paragraph [0018] with the following amended paragraph:

[0018] Referring to FIG. 2, this is a top plan view of part of a display device using the TFT ~~[[100]]~~ 200 according to a second embodiment of the present invention. The gate electrode 2 is in contact with a scanning line 17, the source electrode 7a is in contact with a signal line 18, and the drain electrode 7b is in contact with a pixel electrode 11. The gate electrode 2 receives a signal transported by the scanning line 17. A signal transported by the signal line 18 is received by the source electrode 7a, and then output by the drain electrode 7b to the pixel electrode 11. The pixel electrode 11 holds the potential depending on a storage capacitance (not shown) until the gate electrode 2 performs a next operation.

Please replace paragraph [0020] with the following amended paragraph:

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[0020] Because the gate electrode 2 is deposited in the substrate 1, the thickness of the gate electrode 2 can be changed by changing the depth of the substrate 1 etched. Thus it is easy to increase the thickness of the gate electrode 2 to reduce its impedance. Furthermore, the height of the gate electrode 2 can be almost equal to that of the substrate 1. Therefore, the TFT [[100]] 200 can efficiently reduce an RC delay of a scanning signal. In addition, because the thickness of the gate electrode 2 can be easily increased to reduce its impedance, an area of the gate electrode 2 may in effect be reduced without affecting the impedance of the gate electrode 2. Correspondingly, an area of the pixel electrode 11 may be increased, and thus the display device using the TFT 200 can obtain a higher aperture ratio.